

# Final report

## Develop observer training material for shipboard animal welfare surveillance

Project code LC.RDE.0026

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Prepared by Canopi  
LiveCorp

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Meat & Livestock Australia Limited  
Locked Bag 991  
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## Abstract

The Livestock Export RD&E Program commissioned the development of observer training material for shipboard animal welfare surveillance. This collaborative project, involving LiveCorp and a training specialist, delivered a training package covering the basic principles of animal welfare assessment and the development of skills to enable on-board staff to consistently identify, measure, interpret, and record livestock observations on ships. An Australian Accredited Veterinarian (AAV) and animal welfare subject matter expert were also engaged to provide expert input, guidance, and support for material development and training delivery.

The project aimed to identify the components required to develop user-focused training materials for animal welfare indicators collected on ships. This ensures participants gain the skills necessary for effective live export animal welfare recording and monitoring. It also included the provision and setup of learning management system (LMS) software to manage both face-to-face and online courses, track outcomes, and generate reports to support user management and completion tracking.

The training offered four components, providing core elements and ongoing professional development for the LiveCorp Shipboard Stockperson Training Course, as well as current LiveCorp Accredited Stockpersons, AAVs, Independent Observers, and other industry participants. It was delivered to all LiveCorp Accredited Stockpersons through an introductory webinar and foundational online modules via the new LiveCorp Learning Hub LMS. Additionally, the modules were made available to AAVs and exporter operational staff.

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# 1. Background

A significant amount of data is collected during livestock export voyages to meet regulatory requirements and community expectations for the industry to demonstrate animal welfare performance. A series of animal welfare indicators is collected daily on voyages and are reported to the regulator via the industry's standardised data collection system, LIVEXCollect. However, the subjective and multifaceted nature of some of these welfare assessments requires skills in recording observations of individuals and groups of animals. The Department of Agriculture, Fisheries and Forestry (DAFF), as the regulator, has approved the use of LIVEXCollect as the way for the industry to meet its reporting requirements under the Australian Standards for the Export of Livestock (ASEL).

In 2020, following the completion of research into animal welfare indicators, the Shipboard Animal Welfare Surveillance (SAWS) Committee was formed by the Livestock Export RD&E Program to identify:

- a set of on-board animal welfare indicators that meet the needs of the regulator and the industry
- consistent, standardised procedures for collecting this data

The SAWS committee included experts in the fields of animal welfare, veterinary science and statistics, as well as people with practical knowledge of the on-board environment and representatives from DAFF. These are the indicators that were included in LIVEXCollect as part of the release of ASEL 3.0.

The Livestock Export RD&E Program engaged Canopi to develop a training package covering the basic principles of animal welfare assessment and the development of skills in consistently identifying, measuring, interpreting, and recording observations of individuals and groups of animals. To enable adoption of this program, Canopi was also engaged to provide a learning management system and a training implementation strategy.

## 2. Objectives

### 2.1 Project objectives

The overarching project objectives were:

- implement standardised animal welfare indicators identified by the SAWS Committee in alignment with ASEL 3.0 reporting requirements and animal welfare indicator recommendations into the training modules.
- provide uniform training to all persons observing livestock and collecting animal welfare indicator information to assure consistent and effective delivery of a working animal welfare-focused system.

### 2.2 Training objectives

The content is now part of mandatory training for current LiveCorp Accredited Stockpersons and will be incorporated into the training course for incoming stockpersons.

The objectives of the training program were:

- train participants how to use standardised welfare indicators to assess and report on animal wellbeing during transport via ship
- provide details on each of the welfare indicators to build confidence in selecting the right option for the welfare indicator when undertaking reporting via LIVEXCollect
- facilitate the continued use of the measurement through regular reviews and peer mentoring of shipboard stockpersons to demonstrate knowledge and skills to the required performance standard in observing, identifying, measuring, and interpreting welfare status for individual and groups of animals.

## 2.3 Target audience

Primary audience:

- shipboard stockpersons/AAVs. Observations are conducted on board using the welfare indicators to record data. Under regulation, AAVs are responsible for recording if onboard.
- independent observers are government staff responsible for conducting on-board observations to ensure regulatory requirements are met. It's important that observers have a consistent understanding of the welfare indicators that form the basis of their observations and the reporting data. Proper training is essential to ensure that, when on board ships, they do not confuse stockpersons or AAVs on recording of information by providing inconsistent advice.

## 3. Methodology

### 3.1 Course design and training strategy

The course design was a blended approach to learning, incorporating various components with specific intentions at different stages of the learning program. The diagram below shows the flow of the learning events and the formal required components to fully complete the training. A brief description of each learning event and how it supports the overall learning objectives are discussed below.

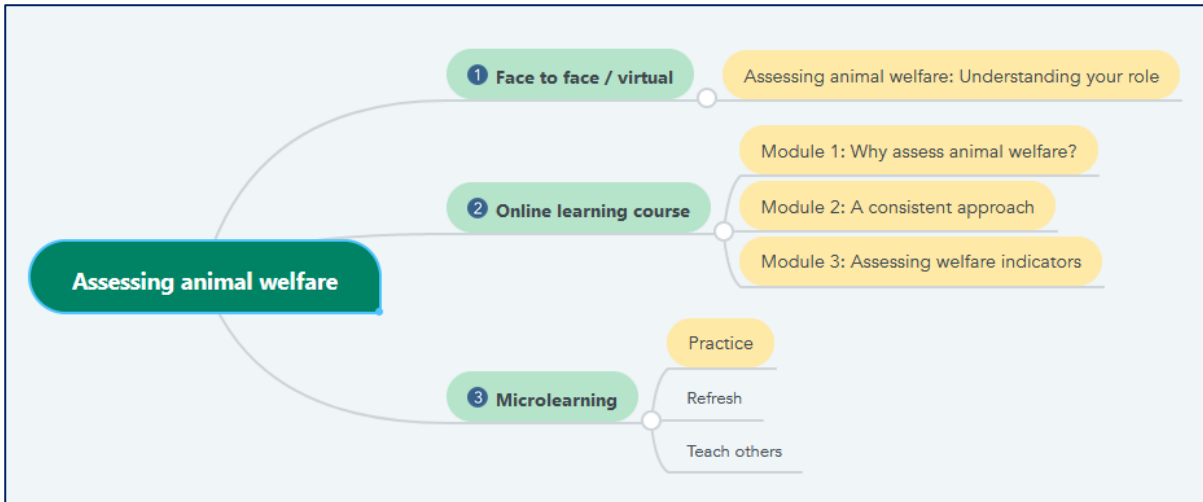


FIGURE 1: The interaction between learning events and overall learning objectives

## 3.2 Face-to-face/virtual session

The face-to-face module is designed to inform learners about how the data is used in the industry and the objectives of the animal welfare indicators. The module introduces participants of the LiveCorp Shipboard Stockperson Training Course to the animal welfare principles in relation to the 21 welfare indicators collected on ships. It also focuses on the welfare indicators that are most difficult to measure. The introductory course gives learners some basic knowledge on the welfare indicators, setting them up for the upcoming modules in the online course. Content covered in the face-to-face module is reinforced and reviewed in modules 1 and 2 of the online course.

For current LiveCorp Accredited Stockpersons, the introductory “Assessing animal welfare: understanding your role” module was presented virtually via webinar. Going forward, this module will be presented in person as part of the LiveCorp Shipboard Stockperson Training Course for any new stockpersons.

## 3.3 Online course

### 3.3.1 Module 1: Why assess animal welfare?

Module 1 reintroduces the learner to the animal welfare principles and the 21 welfare indicators. The module reinforces why the welfare indicators have been developed and what the data will be used for. This module expands on the animal welfare principles and groups the welfare indicators into their respective principles, allowing the learner to see the connection between the welfare indicators and how they can support good animal welfare.

### 3.3.2 Module 2: A consistent approach

Module 2 focuses on consistency in data recording when assessing the welfare indicators. Specifically, it highlights the importance for all the welfare indicators to be assessed using the same approach and metrics so that stockpersons and veterinarians have the same standards - order, frequency and level. Module 2 introduces how the welfare indicators are assessed and recorded for LIVEXCollect as part of daily tasks on ships and who collects the data/makes the welfare assessment.

### 3.3.3 Module 3: Assessing welfare indicators

Module 3 teaches learners how to use standardised welfare indicators to assess and report on animal wellbeing during transport via ship. By the end of module 3, learners should be more confident in selecting the right option when assessing the welfare indicators. Certain welfare indicators that are more complex to measure have more scenarios and interactions to engage the learner. This allows them to think about how best to measure the welfare indicators consistently. This module was split into different categories based on the LIVEXCollect reporting system, allowing the learner to link the assessment of the welfare indicators to how they will do their part of the reporting process.

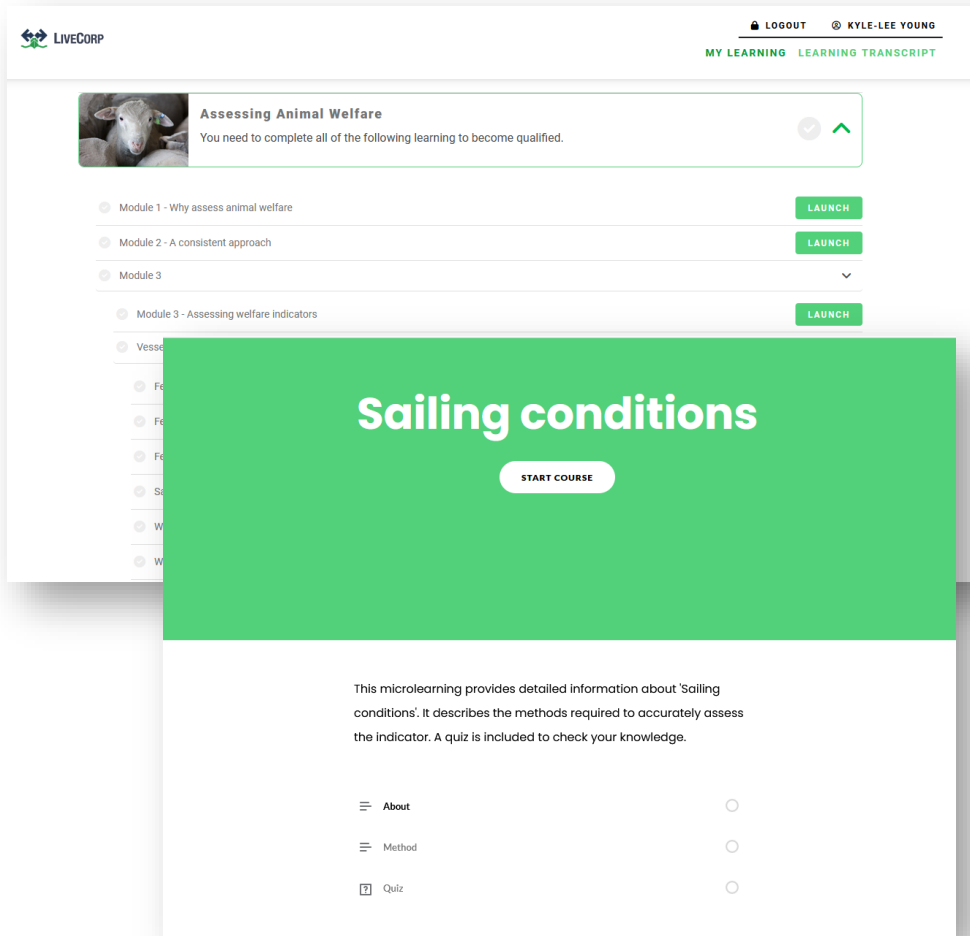


FIGURE 2: Module pages on the LiveCorp Learning Hub

### 3.4 Microlearning

This section identifies the different microlearning streams that take place either on the ship, or offline. The microlearnings are targeted to welfare indicators that are difficult to consistently assess and support further learning to achieve confidence. These microlearning experiences provide online and in person activities, specifically related to a particular welfare indicator to support application for consistency and deeper learning.

#### 3.4.1 Practice

The 'practice' microlearnings are the first set of activities following completion of the foundation online course. These courses are completed during the provisional period for new stockpersons, either before or after voyage experience. They provide opportunities to self-check understanding and practice assessing welfare to ensure competency and consistency.

#### 3.4.2 Refresh

The 'refresh' microlearnings are targeted toward the ongoing application of the assessment process and competency through regular review. The activities for these are generally more complex scenarios to support further learning and revision of basic concepts and processes. These courses will be pushed to learners yearly for compulsory professional development/accreditation requirements.

#### 3.4.3 Teach others

The 'teach others' resources encourage experienced stockpersons or veterinarians to mentor new stockpersons on how to measure the welfare indicators. The resources provide structured activities/discussion points to educate and train provisional stockpersons through on the job experience and feedback.

The 'teach others' resources are available via both online modules and PDFs which are saved in the resources page of the LiveCorp Learning Hub. The PDF versions also support printing and providing this as collateral to be kept on ships for easier access.

### 3.5 Learning pathway

The following learning pathway has been delivered for stockpersons to align with current accreditation requirements.

- 1 **Entry** - Provides foundation skills for new live export stockpersons and upskilling for existing stockpersons. This content can also be used for educating people in other industry roles.
- 2 **Provisional** - Provides self-paced 'practice' microlearning for stockpersons to complete during the provisional period, either before or after voyage experience.
- 3 **Accredited** - Provides self-paced 'refresh' microlearning events to support retention of competency and continuing professional development and 'teach other' resources for head stockpersons to mentor new stockpersons on the job.



## 4. Results

### 4.1 Measuring success

TABLE 1: Strategies for LiveCorp to measure the success of the training

Strategies	Description <i>(describe how you will measure success)</i>	When <i>(period of measurement)</i>	How <i>(i.e. surveys, observations, HR records, LMS reports)</i>
Participation	Logins created Accessing the content	Quarterly for the first year then as required	LMS login reports
Completion	Number of participants successfully completed learning modules	Quarterly for the first year then as required	LMS reports
Engagement	% of known stockpersons and AAVs that have completed the project Awareness of the course (by exporters)	Quarterly for the first year then as required	LMS reports Annual industry survey
Learning	Feedback from participants (stockpersons/ AAVs) as well as exporters and DAFF on what people think of the training.	Ad-hoc	Informal feedback and formal survey
Application/ results	Qualitative assessment of the success of the training based on the improvement in the quality and consistency of the data submitted and therefore understanding of the indicators by users.	Annually	Data analysis and comparison of quality before and after training Informal feedback

### 4.2 Rollout and adoption activities

Table 2: Rollout of extension and adoption activities

Activity	Delivery mode	Audience	Attendees / access provided
Assessing Animal Welfare introductory webinar X 4	Webinar	LiveCorp Accredited Stockpersons and AAVs	40
Assessing Animal Welfare introductory webinar	Webinar	Exporter operational staff	13
Assessing Animal Welfare foundation module	LiveCorp Learning Hub	LiveCorp Accredited Stockpersons and AAVs	105

There are currently many LiveCorp Accredited Stockpersons who are not active (no voyages in the last 12 – 24 months) and a majority of these people have not completed the online training modules. Approximately 80% of stockpersons active in 2024 have partially or fully completed the online training modules.

### 4.3 LiveCorp Learning Hub

#### Deliverables:

- delivered a system with a standard website configuration.
- managed face-to-face and online courses, including a back end Learning Repository System (LRS).
- loaded training content
- set up self-registration, login, and custom reports.
- provided online systems training for administrators and support for IT issues.
- delivered a customised course player, accessible at <https://livecorp.canopi.com.au/>
- implemented an enterprise-level LMS based on the Janison system, located at <https://livecorp.canopih.com.au/>
- implemented an industry standard LRS <https://lrs.io/ui/lrs/livecorp/>
- LMS configured to support accreditation pathways.

LOGOUT TAMI MCCARTHY

HOME MY LEARNING LEARNING TRANSCRIPT RESOURCES COURSE MANAGER RESOURCE MANAGER

### Up next...

Below is the learning to do next.

Practice - Sailing Conditions

Practice - Feed quality

Practice - General demeanour

Practice - Feeding behaviour

Practice - Manure pad score

### Resources

Below are resources to assist your learning.

Job Aid - Assessing Animal Welfare

Teach others resources

All resources

### Your pathways

Explore pathways to see where you are at in your learning progress.

**Practice**

Complete these practice activities to check your knowledge and meet provisional requirements.

✓

**Voyage Experiences**

LAUNCH ✓

**Shipboard Stockperson Training Course**

LAUNCH ✓

**Assessing Animal Welfare**

You need to complete all of the following learning to become qualified.

✓ ✓

**Refresh**


Complete these refresh activities to maintain knowledge and support standardised reporting. LiveCorp will communicate further once available.

✓

**Teach others**

✓

**FIGURE 3: LMS configured to support accreditation pathways**



### Assessing Animal Welfare

You need to complete all of the following learning to become qualified.

✔ ^

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✔	Assessing Animal Welfare - Introductory Webinar	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	Module 1 - Why assess animal welfare	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	Module 2 - A consistent approach	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	Module 3 <span style="float: right;">▼</span>	
✔	Module 3 - Assessing welfare indicators	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	Vessel Observations <span style="float: right;">▼</span>	
✔	Fed to ASEL requirements	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	Feed quality	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	Feed remaining onboard (ROB)	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	Sailing conditions	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	Water consumption	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	Water quality and supply issues	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	Ventilation monitoring	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	Temperatures <span style="float: right;">▼</span>	
✔	Wet bulb temperature	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	Dry bulb temperature	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	Relative humidity	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	Deck records <span style="float: right;">▼</span>	
✔	Cattle faeces type	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	Feeding behaviour	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	General demeanour	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	Posture (lying/standing)	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	Manure pad scores	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	Fleece/coat cleanliness	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	Panting score/Hot spots (sheep)	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	Panting score (cattle)	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	Health reports <span style="float: right;">▼</span>	
✔	Health treatments (morbidity)	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	Mortalities	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	Birth/Abortions report	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>
✔	Scabby mouth	<a href="#" style="background-color: #0070C0; color: white; padding: 2px 10px; border-radius: 3px;">LAUNCH</a>

**FIGURE 4: Summary of the modules available on the LiveCorp Learning Hub**

## 5. Conclusion

Through collaborative efforts among industry stakeholders, animal welfare experts, and training professionals, a comprehensive and detailed training system has been developed. This system is designed to equip livestock observers and stockpersons with advanced skills and knowledge necessary for accurately assessing animal welfare. Moreover, the system emphasises continuous learning, fostering a culture of ongoing improvement and development throughout the livestock industry.

The benefits of conducting this project include:

- increased efficiency and productivity
- reduced risk of compliance error
- improved welfare outcomes for livestock
- simplification of regulatory processes
- improved quality of industry data

## 6. Future research and recommendations

The successful roll out of the “assessing animal welfare” training program on the LiveCorp Learning Hub has provided a solid foundation for future use. In LiveCorp’s rollout and adoption of this project, the following are recommendations or items for consideration in future industry training modules or LMS use:

### 6.1.1 Fresh media

The project was delayed, and some of the module content was difficult to complete due to the lack of media (photos and video) to support animal welfare indicators and indicator scoring ranges. A library of industry training media is required to support more efficient and effective industry training, particularly for online modules.

### 6.1.2 Stockperson support

LiveCorp needed to provide individual support to some LiveCorp Accredited Stockpersons who faced challenges with computer literacy. Without LiveCorp’s support or the ability to complete the training with another stockperson, some stockpersons would not have been able to complete the training.

### 6.1.3 User technology

Not all LiveCorp Accredited Stockpersons had access to a PC or laptop. The LiveCorp Learning Hub could be accessed via a mobile website, with the training modules adjusted to the correct ratio for mobile viewing. However, the homepage and navigation to access the training modules were not optimised for mobile use.

#### 6.1.4 Continued use of LiveCorp Learning Hub

To maximise the value of the new LiveCorp Learning Hub, it is essential to provide a compelling reason for stockpersons to continue engaging with it. All future compulsory professional development, as well as new or updated materials and optional training resources, should be hosted on the Hub. This approach will reduce the need for ongoing support and follow-up, as stockpersons will become familiar with accessing and using the platform. Additionally, centralising resources within the Hub will increase the likelihood of their uptake and utilisation.